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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
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7590 03/15/2004			EXAMINER		
George W. Dishong, Esq.			HEWITT, JAMES M		
40 Brant Road Jaffrey, NH 03452			ART UNIT	PAPER NUMBER	
,			3679		
		•	DATE MAILED: 03/15/200	DATE MAILED: 03/15/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

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•	Application No.	Applicant(s)	
	09/982,507	PRESBY, DAVID W.	
Office Action Summary	Examiner	Art Unit	
	James M Hewitt	3679	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be to within the statutory minimum of thirty (30) do the color and will expire SIX (6) MONTHS frocause the application to become ABANDON	nimely filed ays will be considered timely. m the mailing date of this communication. IED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 04 De	ecember 2003.		
2a)⊠ This action is FINAL . 2b)☐ This	action is non-final.		
3) Since this application is in condition for alloward closed in accordance with the practice under E	·		
Disposition of Claims			
 4) Claim(s) 1-25 is/are pending in the application. 4a) Of the above claim(s) 26-52 is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 1-9 and 16-22 is/are rejected. 7) Claim(s) 10-15 and 23-25 is/are objected to. 8) Claim(s) are subject to restriction and/or 			
Application Papers			
9)⊠ The specification is objected to by the Examine	r.		
10) The drawing(s) filed on is/are: a) acce	epted or b) objected to by the	Examiner.	
Applicant may not request that any objection to the o	drawing(s) be held in abeyance. So	ee 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correcti 11) The oath or declaration is objected to by the Ex		· · · · · · · · · · · · · · · · · · ·	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori	s have been received. s have been received in Applica ity documents have been receiv (PCT Rule 17.2(a)).	tion No /ed in this National Stage	
Attachment(s)			
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summar Paper No(s)/Mail I 5) Notice of Informal 6) Other:		

Art Unit: 3679

DETAILED ACTION

Election/Restrictions

This application contains claims 26-52 drawn to an invention nonelected with traverse in Paper No. 6. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

On line 1, the phrase "The invention comprises couplers" should be replaced with "Couplers".

On line 3, "said" should be replaced with "the".

Claim Objections

Claims 2-3, 8-9, 12-15, 21-22 and 25 are objected to because of the following informalities:

Art Unit: 3679

In claim 2 line 5, "drainage" should be inserted before "conduit" so as to be in better accord with claim 1.

In claim 3 line 5, "drainage" should be inserted before "conduit" so as to be in better accord with claim 1.

In claim 8 line 2, "drainage" should be inserted before "conduit" so as to be in better accord with claim 1.

In claim 9 line 4, "drainage" should be inserted before "conduits" so as to be in better accord with claim 1.

In claim 12 line 5, "drainage" should be inserted before "conduit" so as to be in better accord with claim 1.

In claim 13 line 5, "drainage" should be inserted before "conduit" so as to be in better accord with claim 1.

In claim 14 line 2, "plurality of corrugations" should be replaced with "at least one corrugation" so as to have proper antecedent basis, and to better correspond to claim 2.

In claim 14 line 4, "drainage" should be inserted before "conduit" so as to be in better accord with claims 1 and 2.

In claim 15 line 2, "plurality of corrugations" should be replaced with "at least one corrugation" so as to have proper antecedent basis, and to better correspond to claim 3.

In claim 15 line 4, "drainage" should be inserted before "conduit" so as to be in better accord with claims 1 and 3.

In claim 21 line 2, "drainage" should be inserted before "conduit" so as to be in better accord with claim 16.

Art Unit: 3679

In claim 22 line 4, "drainage" should be inserted before "conduits" so as to be in better accord with claim 16.

In claim 25 line 2, "plurality of corrugations" should be replaced with "at least one corrugation" so as to have proper antecedent basis, and to better correspond to claim 16.

In claim 25 line 4, "drainage" should be inserted before "conduit" so as to be in better accord with claim 16.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-9, and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall (US 4,149,740) in view of Pate et al (US 4,440,425)

With respect to claim 1, Hall discloses a coupler (10) for coupling drainage conduit (16) comprising: a first arcuate coupling member (12) and a second arcuate coupling member (14) attached each to one end of the other via angle braces (36) and bolt means (40). Refer to Figure 4. The coupler is disposed around adjacent ends of aligned conduit (16) and the first and second arcuate coupling members are attachable each to the other (via the braces and bolts) to close said coupler and secure the

Art Unit: 3679

adjacent ends of aligned drainage conduit together in fluid flow communication. Refer to Figure 2. Hall states that his coupler may be of a single piece construction, particularly when smaller diameter pipes are used (see col. 2 line 68 – col. 3 line 2). Pate et al, in Figures 6-7, teaches a one-piece corrugated connector sleeve for coupling together adjacent ends of aligned corrugated conduit. Pate's sleeve comprises two arcuate halves that are hinged together at one end and fastened together via a fastening means (90, 92, 94, 96) that is integral with the two halves. As with Hall's device, the corrugations of Pate's sleeve register with the corrugations of the corrugated conduit to be coupled. In view of Pate's teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hall's onepiece coupler with the hinge and fastening means of Pate in order to permit easier attachment of the coupler about adjacent ends of aligned conduit and to reduce stress resulting from bending of the one-piece conduit when attaching and removing the coupler, and to avoid the possibility of losing the nuts and bolts required to couple and uncouple Hall's coupler and to avoid the use of tools required to couple and uncouple Hall's coupler.

Thus, from Figures 6 and 7 in Pate et al, the hinge region would be at hinge (88), the first attaching component would be one of straps (94, 96), and the second attaching component would be a corresponding one of blocks (90, 92).

From Hall's disclosure it is clear that the pipes that are being joined are for carrying water. He speaks of providing a watertight seal between pipe sections to prevent any leakage therethrough. Also, Hall's pipe sections to be coupled are

Art Unit: 3679

corrugated. Thus, it should be understood that the scope of Hall's invention is inclusive of drainage conduit. If for some reason this is not the case, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ Hall's device to couple drainage conduit, as drainage conduit is often corrugated and often is used to convey water.

With respect to claim 2, wherein the first coupling member comprises at least one corrugation (32 in Hall) in the first coupling member, said at least one corrugation located and spaced to fit within and mate or interfit with at least one corrugation of corrugated conduit. Refer to Figure 2 in Hall.

With respect to claim 3, wherein the second coupling member comprises at least one corrugation in the second coupling member, said at least one corrugation located and spaced to fit within and mate or interfit with at least one corrugation of corrugated conduit. Refer to Figure 2 in Hall.

With respect to claim 4, wherein the first component comprises a plurality of ridges (see Figure 6 in Pate et al).

With respect to claim 5, wherein the second component comprises a plurality of detents which cooperate with the ridges of the first component to close and secure the coupler in a closed position. Refer to col. 10 lines 40-48 in Pate et al.

With respect to claims 6 and 7, Pate is silent as to whether his first and second cooperating attaching components are irreversibly attachable or detachable from one another once attached. Nevertheless, it would have been an obvious matter of design

Art Unit: 3679

choice to employ either irreversibly attachable components or readily detachable components in Pate depending on the application for which Pate's coupling is used.

With respect to claim 8, wherein the inside diameter of said coupler is about equal to or slightly greater than the outside diameter of the conduit being coupled. Refer to Figure 2 in Hall.

With respect to claim 9, further comprising an elastic material (50 in Hall) disposed on the interior surface of each of the first and second arcuate coupling members of said coupler, which said elastic material is compressible against the outer surface of the drainage conduits being coupled. Refer to col. 4 lines 22-36 in Hall.

With respect to claim 16, Hall discloses a coupler (10) for coupling corrugated drainage conduit (16) comprising: a first arcuate coupling member (12) and a second arcuate coupling member (14) attached each to one end of the other via angle braces (36) and bolt means (40). Refer to Figure 4. The coupler is disposed around adjacent ends of aligned conduit (16) and the first and second arcuate coupling members are attachable each to the other (via the braces and bolts) to close said coupler and secure the adjacent ends of aligned drainage conduit together in fluid flow communication. Refer to Figure 2. Hall states that his coupler may be of a single piece construction, particularly when smaller diameter pipes are used (see col. 2 line 68 – col. 3 line 2). Pate et al, in Figures 6-7, teaches a one-piece corrugated connector sleeve for coupling together adjacent ends of aligned corrugated conduit. Pate's sleeve comprises two arcuate halves that are hinged together at one end and fastened together via a fastening means (90, 92, 94, 96) that is integral with the two halves. As with Hall's

Art Unit: 3679

device, the corrugations of Pate's sleeve register with the corrugations of the corrugated conduit to be coupled. In view of Pate's teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hall's one-piece coupler with the hinge and fastening means of Pate in order to permit easier attachment of the coupler about adjacent ends of aligned conduit and to reduce stress resulting from bending of the one-piece conduit when attaching and removing the coupler, and to avoid the possibility of losing the nuts and bolts required to couple and uncouple Hall's coupler and to avoid the use of tools required to couple and uncouple Hall's coupler.

Thus, from Figures 6 and 7 in Pate et al, the hinge region would be at hinge (88), the first attaching component would be one of straps (94, 96), and the second attaching component would be a corresponding one of blocks (90, 92).

From Hall's disclosure it is clear that the pipes that are being joined are for carrying water. He speaks of providing a watertight seal between pipe sections to prevent any leakage therethrough. Also, Hall's pipe sections to be coupled are corrugated. Thus, it should be understood that the scope of Hall's invention is inclusive of drainage conduit. If for some reason this is not the case, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ Hall's device to couple drainage conduit, as drainage conduit is often corrugated and often is used to convey water.

Also, with respect to claim 16, wherein the first coupling member comprises at least one corrugation (32 in Hall) in the first coupling member and wherein the second

Art Unit: 3679

coupling member comprises at least one corrugation in the second coupling member, said at least one corrugation of each said first and second arcuate coupling members located and spaced to fit within and mate or interfit with at least one corrugation of corrugated drainage conduit. Refer to Figure 2 in Hall.

With respect to claim 17, wherein the first component comprises a plurality of ridges (see Figure 6 in Pate et al).

With respect to claim 18, wherein the second component comprises a plurality of detents which cooperate with the ridges of the first component to close and secure the coupler in a closed position. Refer to col. 10 lines 40-48 in Pate et al.

With respect to claims 19 and 20, Pate is silent as to whether his first and second cooperating attaching components are irreversibly attachable or detachable from one another once attached. Nevertheless, it would have been an obvious matter of design choice to employ either irreversibly attachable components or readily detachable components in Pate depending on the application for which Pate's coupling is used.

With respect to claim 21, wherein the inside diameter of said coupler is about equal to or slightly greater than the outside diameter of the conduit being coupled.

Refer to Figure 2 in Hall.

With respect to claim 22, further comprising an elastic material (50 in Hall) disposed on the interior surface of each of the first and second arcuate coupling members of said coupler, which said elastic material is compressible against the outer surface of the drainage conduits being coupled. Refer to col. 4 lines 22-36 in Hall.

Art Unit: 3679

Allowabl Subject Matt r

Claims 10-15 and 23-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Note however that the allowability of claims 12-15 and 25 is contingent on overcoming the above noted objections to claims 12-15 and 25. See *Claim Objections* above.

Response to Arguments

Applicant's arguments with respect to claims 1-5, 8, 9, 16-18, 21 and 22 have been considered but are most in view of the new ground(s) of rejection.

Regarding the 35 U.S.C. 103(a) rejection of claims 6, 7, 19 and 20 (see page 29 of Applicant's Remarks), Applicant makes no specific arguments thereagainst and does not challenge the official notice. The limitations of claims 6-7 and 19-20 are thus considered to be admitted prior art.

Applicant's arguments, see page 29 fifth paragraph through page 30 fourth paragraph, filed 12/4/03, with respect to claims 10-11 and 23-24 have been fully considered and are persuasive. The 35 U.S.C. 103(a) rejection of claims 10-11 and 23-24 has been withdrawn.

Art Unit: 3679

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Minemeyer, Schwarz et al, Ledgerwood, Campbell, Freeze, Wise, martin, Fukui et al, and Seung-Kyu all constitute prior art devices considered by the examiner to be relevant to the claimed invention(s).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M Hewitt whose telephone number is 703-305-0552. The examiner can normally be reached on M-F, 930am-600pm.

Application/Control Number: 09/982,507 Page 12

Art Unit: 3679

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on 703-308-1159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James M. Hewitt

James M. Hewith

Patent Examiner

Technology Center 3600